August 20, 2007

U.S. Army Corps of Engineers, Mobile District
Planning and Environmental Division
P.O. Box 2288
Mobile, AL 36628-0001

Attention: Ms. Jennifer Jacobson/ Mr. Matthew Lang

Subject: EPA Comments on the Draft Supplemental Environmental Impact Statement (Draft SEIS) for the Proposed Pascagoula Harbor Navigation Channel, Harrison County, MS; CEQ #: 20070276, ERP #: COE-E32061-MS.

Dear Ms. Jacobson:

Pursuant to Section 309 of the Clean Air and Section 102(2)(C) of the National Environmental Policy Act (NEPA), EPA, Region 4 has reviewed the subject document. The project evaluates the consequences of the U.S. Army Corps of Engineers (USACE) proposal to widen the Gulf entrance channel from 450 to 550 feet and deepen both the upper Pascagoula Channel from 38 to 42 feet between Bayou Casotte Channel and a point one mile south of the railroad bridge in the bar channel, and the Horn Island impoundment basin from 44 to 56 feet, respectively.

The purpose and need for the proposed deepening and widening is to construct congressionally authorized improvements to the channel that provides for safe and unrestricted navigation into and out of Pascagoula and Bayou Casotte Harbor, and adequate disposal of dredged material.

Two alternatives are examined in the DSEIS, including a no-action and action alternative (i.e. deepening and enlarging the Harbor). Deepening and enlarging the Harbor requires dredging and disposal of approximately 5.8 million cubic yards of material [3.6 M of new work material and 2.2 M of maintenance material]. The sediment will be removed using various dredging methods including mechanical dredging and hydraulic cutter head and hopper dredging. Three disposal options for the dredged material are examined in the Draft SEIS – Littoral zone disposal, use of existing Pascagoula Ocean Dredged Materials Disposal Site (ODMDS) located south of Safety fairway, and Placement in existing open water disposal sites in the Mississippi Sound.

Based on the information in the DSEIS, EPA has the following comments for the USACE's consideration on the proposed action:

Section 2.2: Need for Proposed Action

1. The need for the proposed action should be substantiated with more data. The DSEIS indicates that pre-Hurricane Katrina documentation shows frequent "waiting at anchor" status of many vessels entering the Port and that vessels often have to wait in Port while inbound vessel navigate through the channel (MS Coastal Program SMA Task Force, 1985). This data reference is twenty years old. There is no discussion regarding the percentage, numbers, average wait times, and or level of congestion in the Harbor. Does this data represent current conditions and take into account the improvements completed in 1999? The DSEIS does state that large vessels have to travel at a rate of 3 knots and their travel is limited to daylight hours for safety.

2. EPA notes that the impacts of new LNG terminals on travel speeds and resources are considered. The DSEIS states that LNG tankers operating in the channel will have an adverse financial impact to shippers operating out of Pascagoula.

Recommendation*:* The FEIS should supply more specific information on issues such as the "frequent waiting at anchor" status of vessels. A small table of number of vessels/month and average delays would be useful. Data should be as current as possible.

Section 3.0*: Alternatives*

1. The DSEIS indicates that the project will generate 3,628,900 yd^3 of new work and 1,152,600 yd^3 of maintenance material from portions of the channels in the Mississippi Sound every 18 months and 951,600 yd^3 from other portions of the Harbor areas every 30 months. It does not include projections (30 year) of annual estimated maintenance volumes.

2. The DSEIS also states that limited amounts of dredged material would be removed from the channel outside the barrier islands on an as needed basis. It is unclear if this dredging is part of what has been congressionally authorized and whether these impacts are evaluated in the DSEIS.

3. The DSEIS states that "Any suitable material removed from the Bar Channel segment will be placed in the existing disposal sites (i.e. open water area 10 and or littoral zone site) in order to remain in the littoral system." What volume of material is anticipated to meet the "Any suitable material" criteria? What is the criterion for "suitable?"

Recommendation: The final EIS should include 30 year projections for annual estimated maintenance volumes? The statement that limited amounts of material will be removed outside the barrier islands as needed should also be clarified (i.e. rationale, what is limited, as needed for what, is this in addition to the amount of new work/maintenance material (5.6M) described in DSEIS). In addition, the final EIS should discuss what volumes of Bar Channel material are anticipated to be suitable for disposal in the existing disposal sites and it should also better define the criteria for suitability.

Section 3.3.3 Alternatives
In general, this section of the DSEIS needs additional information, and does not provide specific and or a substantiated rationale for the alternatives that are deemed non-viable. The final EIS should provide additional information on this issue.

1. Alternative Eliminated Not Summarized: The DSEIS states that "the alternatives identified in previous reports and eliminated from further analysis are not reviewed in this DSEIS (Executive Summary**)**."

2. Thin-Layer Disposal Eliminated: This section states that "It is anticipated the new work material located within the Mississippi Sound segment of the channel would consist of packed clays not conducive to this type of disposal, as clays would not spread throughout the open-water sites;"... Why is it "anticipated" that the material would consist of packed clays? The proposed new work material should have been sampled, tested and characterized. If the material has not been tested it cannot be placed to an ODMDS. If the material has not been tested, when will it be tested?

3. Wetland Creation Carried Forward: The DSEIS discusses of potential for dredged maintenance materials being beneficially used to create at least 150 acres of tidal marsh habitat on Singing River Island. Geotubes will be used to construct the containment dike to prevent erosion. This man-made island is approved as an upland disposal site.

Recommendation: EPA commends the COE on the beneficial reuse of some of this material for wetland creation. It may be necessary to summarize and re-evaluate some of the previously eliminated alternatives in the final EIS, in light of recent events, (i.e., Hurricanes Katrina and Rita). Possible beneficial use alternatives may be available now that were not available or feasible previously. We should encourage that all potential beneficial use options be considered. The final EIS should indicate how much dredge material will be used for beneficial use.

The final EIS should also indicate when and how the USACE would know whether the disposed material is conducive to thin-layer disposal.

Section 4.4.5.4 Toxicity Testing
1. Based on the water column toxicity test results using larval development and survival rates, the material from portions of the project may not be suitable for ocean disposal. Modeling and management of this material to meet the Limiting Permissible Concentration for ocean disposal is not adequately discussed.

2. The DSEIS states that 28-day bioaccumulation tests were conducted with *Nereis virens* and *Macoma nasuta.* No results are presented or discussed in the document. These are required as part of the *Marine Protection, Research, and Sanctuary Act (MPRSA)* Section 103 Evaluation.

3. There is no mention of 10-day whole sediment toxicity tests, or results, which are required as part of the MPRSA Section 103 Evaluation.

Recommendations: EPA requests that detailed toxicity information should be provided during the MPRSA 103 evaluation. The actual data for the 28-day bioaccumulation test results that are designed to evaluate the survival rates of benthic organisms and the potential for bioaccumulation of contaminants of concern within the organisms' tissues should be submitted to EPA and summarized in the final EIS. Test results for the 10-day whole sediment toxicity test should also be submitted and summarized in the final EIS.

Section 4.3 - Biological Resources

1. To accomplish the proposed upgrades, a number of biologically important communities (submerged aquatic vegetation - SAV, and essential fish habitat - EFH) will be adversely affected by the dredging activities.

A. SAV: There is a mapped seagrass bed within open water disposal area #10. This area is proposed for new dredging work disposal associated with Horn Island Impoundment Basin. SAV within this disposal area provides valuable food and shelter in shallow freshwater and brackish water systems of the SE for manatees and a variety of water fowl and important commercial and recreational fisheries. The DSEIS states that "The majority of seagrasses are found in the Gulf Islands National Seashore (the dredging project is in this National Seashore), but the amount of SAV has declined dramatically. For example, SAV surveys on the north side of Horn Island recorded 417 acres in 1956, 138 acres in 1987, and 14 acres in 1992." Given these important functions and the preceding statistics, it is important that every effort is made to preserve these resources.

The DSEIS also states: "placement of dredged material may result in the burial of some plants but the long-term benefit of replenishing the sediments and maintaining a suitable water column depths to support SAV would exceed the limited loss to burial. Any negative impacts from placement of dredged material would be temporary and minor, while long-term impacts from sediment replenishment would be beneficial" (p. 5-4). Is there supporting data to support this assertion?

Recommendations: EPA recommends that every effort should be made to avoid impacts to SAV. Alternative disposal areas away from SAV and other critical habitat should be pursued. In addition, supporting data should be included that support the assertion that impacts will be minor and temporary. In addition, the final EIS should define what temporary impacts mean (time-frame, frequency, and amount). We also recommend continued coordination with the National Oceanic and Atmospheric Administration (NOAA) and commercial and residential fishermen dependant on these resources

B. The DSEIS states that there are 13 species of fish and four shellfish that have EFH designations with the Pascagoula Navigation Channel project will result in temporary adverse affects to Essential Fish Habitat and temporarily disrupt mature fish and shrimp communities in the vicinity of dredging materials. According to the DSEIS, recovery and recolonization will be rapid once work is complete and no mitigation is required because ample habitat exists. Yet the DSEIS also states that potential minor loss of organisms could be mitigated by timing dredging operations to avoid peak migration periods. (Table ES-2)

Recommendations: EPA recommends that dredging operations should be timed to avoid peak migration periods as suggested. In addition, the FEIS should define what temporary impacts mean (time-frame, frequency, and amount). We also recommend continued coordination with the National Oceanic and Atmospheric Administration (NOAA) and commercial and residential fishermen dependant on these resources.

Section 5.2.10.1 Threatened and Endangered Species
1. The DSEIS states that the USACE is required to comply with an RBO for hopper dredging impacts on sea turtles. The FEIS should discuss how the "Screening of 100 percent of dredged material with a 4-inch by 4-inch screen" will be accomplished? EPA recommends continued coordination with NOAA on these issues.

Section 6.6 Marine Protection, Research, and Sanctuaries Act
This section states "This DSEIS has been completed in coordination with appropriate state and federal agencies in accordance with the MPRSA and includes an evaluation of the Proposed Action's potential impacts to resources protected under this act."

The DSEIS does not mention the required MPRSA Section 103 Evaluation, supporting sediment physical, chemical, and biological testing report, or the District Engineer's determination of the material's compliance with the Ocean Dumping Regulations, and formal request for EPA's concurrence with that determination.

The material generated by this project cannot go to the Pascagoula ODMDS without a full MPRSA Section 103 Evaluation, with all supporting documentation. EPA must review a formal submittal requesting our review and concurrence. If our review determines that the material meets the Ocean Dumping Criteria, EPA will issue a concurrence letter, contingent on compliance with the requirements and conditions of the current Pascagoula Site Management and Monitoring Plan, and the requirements of the current MOU between EPA Region 4 and the USACE SAD.

Recommendations: EPA needs a complete, separate, MPRSA *Section 103 Evaluation, Sediment Testing Report*, associated supporting documentation package and a letter from Mobile District stating their determination that the proposed material meets the Ocean Dumping Criteria. The letter should request EPA's review and concurrence and be submitted to EPA Region 4 in order for the proposed material to be considered for disposal in any of the ODMDSs available for disposal. This information should be sent directly to Doug Johnson to ensure that appropriate MPRSA coordination has been completed.

Section 5.12 Cumulative Impacts*:* The cumulative impacts analysis section should include additional information and appropriate discussion of any reasonably foreseeable cumulative impacts (CI) associated with this project. The section primarily focuses on the Jackson County Port Authority and interaction with surrounding transportation infrastructure, Katrina related trash and debris, and the SDEIS mentions Gulfport Harbor expansion but states that the projects are 10-miles apart and are separated by time and therefore should not impact the same resources. However, these projects are similar and both will contribute to commercial shipping along

Coastal Mississippi, contribute to the regional economic recovery, and impact resources along the Mississippi Coast.

Recommendation: EPA commends the USACE efforts to address cumulative impacts in the SDEIS and disclose other port expansions in the surrounding area. We recommend that additional information and an appropriate discussion of reasonably foreseeable CI be discussed in the FEIS. These areas may include include, but are not limited to:

1. Existing federal and state permitted facilities (i.e., number and type of NPDES permits) in the project area along and any reasonably foreseeable cumulative impacts associated with this project and those permitted activities (i.e., oil and gas and mineral extraction rights leases).
2. Any future State plans for construction of additional fish havens or artificial reefs in the area.
3. Proposed harbor expansions and ocean disposal sites in the vicinity of the proposed project, including those in the Gulfport and Mobile areas along with appropriate discussion of potential impacts, if available.

Based on our review of this project, we have assigned a rating of EC-2 (environmental concerns, additional information requested) to the SDEIS. We recommend every effort be made to minimize the environmental impacts to biological resources such as SAV, find beneficial uses to the extent practicable for the disposal material and provide EPA with the *MPRSA Section 103 Evaluation, Sediment Testing Report* to ensure that the disposal material meets the Ocean Dumping Criteria.

We appreciate your coordination. The EPA technical contact will be Doug Johnson (404/562-9386) located in our Water Division, while the NEPA contact will be Ntale Kajumba (404/562-9620) of my staff in the EPA Atlanta regional office.

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Enclosure 1: Additional EPA Comments on Pascagoula Harbor Navigation Channel DSEIS
Enclosure 2: Summary of Rating Definitions

Additional EPA Comments on the DSEIS for Pacagoula Harbor

Sections 5.9, 5.2.10 and 5.11.7 Noise, T&E Species and Navigation and Ports
There are contradictions between the statement that the dredging would only be operating for a few days (see p. 5-6) and the statement, "it is anticipated that channel widening and deepening would take several months to complete (p. 5-28). In addition, "The potential noise effects would be limited to several days" (p. 5-19).

What time of year will the dredging take place, e.g., NOAA Fisheries requested hopper dredging operations be scheduled between Dec. 1 and March 31, whenever feasible. Is this feasible? What is the anticipated frequency and intensity of activities, particularly the disposal aspects?

Recommendation: The final EIS should appropriately describe the duration of the proposed channel widening and deepening to ensure that all assessments are evaluated appropriately. In addition, EPA recommends that the proposed schedule for port expansion activities should be included in the final EIS.

Section 5.10 Air Pollutants: The SDEIS states that air emissions associated with dredging operations, placement of materials, and anticipated increases in port-related truck and railroad activity subsequent to the increase in Port cargo are expected to be minimal. The DSEIS also states "Where available, the following technologies would be used to minimize air emissions in the proposed action's boundary: electric dredges, use low sulfur diesel in equipment, fuel additives, and particulate filters."

Recommendation: The final EIS should include data to support the conclusion that air emissions associated with the port expansions will be minimal. EPA recommends that alternative fuels and other pollution prevention and greening measures should be used to minimize air quality impacts to the greatest extent practicable. These technologies are readily available and use of them should be documented in the final EIS.

Indirect Impacts: The SDEIS does not discuss the indirect environmental effects of commercial expansion and increased shipping associated with this proposed action regarding the Port Pascagoula. The increased port traffic of larger vessels with more tonnage could result in growth along the coastline in the vicinity of Gulfport, e.g., increased population, vehicle traffic, coastal pollution, etc. International Council on Clean Transportation Report (ICCT) estimates that 17% of nitrogen oxide emissions come from ships which can contribute more than 25% of the pollutant in some port cities.

EPA notes that Jackson County is in attainment for all criteria pollutants. But, how will increased nitrogen emissions in the Gulf of Mexico impact the water quality index which is reported to demonstrate "fair" quality as a result of higher levels of phosphorous and nitrogen? This pollution is associated with the ships' emissions and not the emissions that can be expected from increased trucking and rail.

Recommendation: The final EIS should discuss the impact of nitrogen emissions on the water quality index.

Section 5.11.4. Land, Water, and Transportation: The DSEIS states that "expansion of the navigation channel would result in increased volumes of cargo transported to and from the Port, which may result in secondary impacts of increased traffic on nearby railroads and roadways along existing railways and local roads, highways and the interstate. Local traffic patterns could be affected by the increased traffic." What is the existing and projected level of service (LOS) on the associated roads? Can the existing facilities adequately handle the expected increased traffic? According to the June 20, 2006 Peer Report: The Impact of Hurricane Katrina on Mississippi's Commercial Public Ports and Opportunities for Expansion of the Ports" (www.peer.state.ms.us/reports/rpt487.pdf), Mississippi's three Gulf ports have limited rail service as a constraint to their commercial expansion while they are surrounded by and forced to compete with major ports (i.e., New Orleans, Mobile, Houston). While Port of Pascagoula may have the road system to get to the Interstate, what is the condition of these local roads?

Recommendation: The final EIS should discuss the impact of the expansion on local traffic patterns, and detail the existing and projected LOS on the local roads and roads serving the ports.